



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
PO Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,303	12/30/1999	GILBERT WOLRICH	10559/133001	7635

20985 7590 09/04/2003
FISH & RICHARDSON, PC
4350 LA JOLLA VILLAGE DRIVE
SUITE 500
SAN DIEGO, CA 92122

EXAMINER

THOMPSON, MARC D

ART UNIT	PAPER NUMBER
----------	--------------

2142

DATE MAILED: 09/04/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)
	09/476,303	WOLRICH ET AL.
	Examiner	Art Unit
	Marc D. Thompson	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 18 June 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.

 4a) Of the above claim(s) 19 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 18 June 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a) All b) Some * c) None of:

 1. Certified copies of the priority documents have been received.

 2. Certified copies of the priority documents have been received in Application No. _____.

 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. This application has been reassigned to a new Examiner. See Conclusion section below, for new Examiner contact information

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
3. Applicant's submission, Amendment C, Paper #15, received 6/2/2003, has been entered.
4. Claims 1-19 remain pending.
5. Claim 19 remains withdrawn from consideration. This claim is directed to a different invention than the elected group currently undergoing examination. Cancellation of this claim will be required should the current claims be found to contain allowable subject matter.

Priority

6. No claim for priority has been made in this application.
7. The effective filing date for the subject matter defined in the pending claims in this application is 12/30/1999.

Drawings

8. The Examiner contends that the drawings submitted on 6/18/2003 are acceptable for examination proceedings.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-18 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. As a general note, Examiner has reported issues regarding undue breadth of the claimed invention during a previous Applicant initiated interview in regard to this application. See Interview Summary, Paper #12, mailed 5/15/2003. Applicant was given express direction for remedy of this claim condition, and has failed to sufficiently clarify the claimed invention in accordance with these suggestions. Applicant has had numerous opportunities to amend the claimed subject matter and has failed to modify the claim language to distinguish over the prior art of record by clarifying or substantially narrowing the claim language as suggested. Further, Applicant has not argued any narrower interpretation of the claim language nor amended the claims significantly enough to construe a narrower meaning to the limitations. As the claims breadth allows multiple interpretations and meanings which are broader than Applicant's disclosure, the Examiner is forced to interpret the claim limitations as broadly as reasonably possible, in determining patentability of the disclosed invention. Thus, Applicant apparently intends that a broad interpretation be given to the claims and the Examiner has adopted such in the present Office action rejection(s). See *In re Prater and Wei*, 162 USPQ 541 (CCPA 1969), and MPEP § 2111. Lastly, Applicant employs broad language which includes the use of words and phrases which have broad meanings in the art; Applicant employs terminology which has

broad meaning in the art and thus requires a broad interpretation of the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Since Applicant uses broad terms which have broad meaning in the art, and in view of failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intend broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response, and reiterates the need for the Applicant to clearly, distinctly, and uniquely claim the invention. The current claims infer coverage breadth which is inconsistent with breadth of the disclosure and are not found distinguishable above the prior art of record, as detailed below.

12. Claim 3 and 15 recite "selecting one of the plurality of processes" in line 2 of the claim. The breadth of this limitation renders this claim indefinite. It is unclear what process is "selected", the criterion used to "select", the results of any "selection", and/or what utility this process is describing.

13. Claim 5 and 16 recite the limitation "process the data" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claims. It is unclear whether the "additional data" as previously defined is intended to be the "data to be processed" by one of the processes. Further, the claim recites "choosing an available [] process[]" in lines 4-5 of the claim. It is unclear (similar to claim 3/15) what this "choosing" step incurs, an criterion used to "choose" a process, and/or any resultant functionality or evidence of "choosing". Lastly, this

claim fails to recite that the "data" is even processed by the "chosen" process, further failing to detail any specific type of processing alleged by the system.

14. Claim 1 and 13 recite "the plurality of processes including at least one thread" in Line 4 of Claim 1, and Line 5 of Claim 13. It is unclear why this limitation was deleted from each preamble, which would have provided proper antecedent basis for this limitation, if Applicant intends that each of the plurality of processes include at least one thread, as assumed and previously claimed. Thus, it is unclear what portion or limitation of the claim(s) are intended to "include at least one thread". Lastly, the provision for multi-threaded functionality remains aside from any issue(s) relating to port-to-process mapping, since there is no expressly recited functionality dealing with individual threads of the process level -- only the (logical) process level itself.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)):

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

16. Claims 1-18 are rejected under 35 U.S.C. §102(b) as being anticipated by Yasrebi (U.S. Patent Number 5,463,625), hereinafter referred to as Yasrebi '625, or alternatively, under 35

U.S.C. §102(e) as being anticipated by Yasrebi (U.S. Patent Number 6,141,689), hereinafter referred to as Yasrebi '689.

17. It is noted that Yasrebi '625 fully incorporates by reference Yasrebi '689, and vice-versa.

See Yasrebi '625, Column 9, Lines 63-67, and Yasrebi '689, Column 3, Lines 18-29. This combination of references will be treated as a single, combined document.

18. Yasrebi disclosed methodology mapping physical and/or logical ports with particular processes and/or threads. See Yesrebi '625, *inter alia*, Column 8, Lines 5-12, and Yasrebi '689, Figure 2. The claims were fully disclosed as follows:

(claim 1, 13)

1. *assigning one of a plurality of ports to one of a plurality of processes [with a scheduling thread]*, was taught by Yasrebi '625 in Column 8, Lines 20-29, and Yesrabi '689, *inter alia*, in Column 9, Lines 5-10, or Column 11, Lines 1-9.
2. *processes including at least one thread*, was taught by Yasrebi '625 in Column 8, Line 30, and Yasrebi '689, *inter alia*, in Column 12, Lines 26-30.
3. *determining that additional data is available from the assigned port*, was taught by Yasrebi '689 in Column 11, Lines 13-16. If the port was not "idle" and/or the port was currently active in a communication, data was determined to be forthcoming.
4. *awaiting notification by one of the plurality of processes that processing of the additional data has been completed prior to reassigning the port to one of the plurality of processes*, was taught by Yasrebi '689 in Column 10, Lines 24-30. Every port communication was timed between PortOpen and PortClose function calls (i.e., active), and each port was assigned in response to call/RPC initiation. Thus, a "session", call, or RPC termination or

"sharing" (port sharing, as disclosed by Yasrebi '689 was optional functionality in Column 11, Lines 26-36) was required prior to reassignment of the port to a thread or process. Without multiplexing (more optional functionality), only one thread may use any particular port. See Yasrebi '689, *inter alia*, Column 10, Lines 45-63, and Column 12, Lines 31-37.

(claim 2, 14)

5. *determining if data is available from one of the plurality of ports*, was taught by Yasrebi '689, *inter alia*, in Column 11, Lines 10-21. The provision for "marking" ports as "idle" fully meets this claim limitation.

(claim 3, 15)

6. *selecting one of the plurality of processes*, and,

(claim 4)

7. *directing transfer of the data from the assigned port to the one of the plurality of processes for processing*, was taught by Yasrebi '689, *inter alia*, in Figure 2. Each thread of each process used a port as a conduit of for communication uniquely; each arbitrary thread within a process used only one port for bi-directional communication.

Additionally, the gateway provided this express functionality. See Column 5, Lines 35-38, and Column 10, Lines 17-23.

(claim 5, 16)

8. *determining if any of the plurality of processes is available to process the data*, was taught by Yasrebi '689 in Column 7, Lines 51-58, and Column 10, Lines 45-51.

Art Unit: 2142

9. *[selecting] an available process [for assumed processing]*, was taught by Yasrebi '689 in Column 7, Lines 55-56, and Column 10, Line 38 through Column 11, Line 9.

(claim 6, 17)

10. *recording the port-to-process assignment on an assignment list*, and,

(claim 7, 18)

11. *removing the port-to-process assignment from the assignment list upon receiving notification that the processing has been completed*, was taught by Yasrebi '689 in Column 12, Lines 6-8.

(claim 8, 9, 10)

12. *data comprises [at least a portion of] network packet data*, was taught by Yasrebi '689 in Column 7, Lines 65-66.

(claim 11, 12)

13. *network packet comprises an Ethernet packet, [and] one of the plurality of ports is an [] Ethernet port*, was taught by Yasrebi '689 in Column 7, Lines 65-66, and Column 8, Lines 31-36.

19. Since all the claimed limitations were set forth by the teachings of Yasrebi, claims 1-18 are rejected.

Response to Arguments

20. Applicant's arguments may fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. See Response, Paper #15, Page 6. Substantial difference exists between the extent of amendment

and the detail of discussion between Examiner and Applicant on 5/15/2003. See Paper #12, Interview summary.

21. The arguments presented by Applicant in the response, Paper #15, received on 6/4/2003, are not considered persuasive.

22. Applicant has had multiple opportunities to amend the claimed subject matter, and has failed to modify the claim language to distinguish over the prior art of record by clarifying or substantially narrowing the claim language. Thus, Applicant apparently intends that a broad interpretation be given to the claims and the Examiner has adopted such in the present and previous Office action rejections. See *In re Prater and Wei*, 162 USPQ 541 (CCPA 1969), and MPEP § 2111. Further, Applicant employs broad language which includes the use of words and phrases which have broad meanings in the art. In addition, Applicant has not argued any narrower interpretation of the claim language, nor amended the claims significantly enough to construe a narrower meaning to the limitations. As the claims breadth allows multiple interpretations and meanings which are broader than Applicant's disclosure, the Examiner is forced to interpret the claim limitations as broadly as reasonably possible, in determining patentability of the disclosed invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Hardwick et al. (U.S. Patent Number 5,550,816) disclosed virtual switching in a

protocol processing environment.

2. Zornig et al. (U.S. Patent Number 5,742,587) disclosed a port switching hub for use in logical local area networks (LLANs).

3. Sharma et al. (U.S. Patent Number 5,809,235) disclosed classes for defining objects and functional code segments for port interfacing.

4. Spix et al. (U.S. Patent Number 6,195,676) disclosed control for scheduling threads within multithreaded programs/processes to input/output operations.

5. Lucovsky et al. (U.S. Patent Number 6,223,207) disclosed input/output services for multithreaded applications.

6. Guenthner et al. (U.S. Patent Number 6,360,262) disclosed mapping processes directly to ports.

24. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marc Thompson whose telephone number is (703) 308-6750. The Examiner can normally be reached on Monday-Friday from 9am to 4pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark Powell, can be reached at (703) 305-9703.

The fax phone numbers for the organization where this application is assigned are as follows:

(703) 746-7238	(After Final Communications only)
(703) 746-7239	(Official Communications)
(703) 746-7240	(for Official Status Inquiries, Draft Communications only)

Inquiries of a general nature relating to the general status of this application or proceeding should be directed to the 2100 Group receptionist whose telephone number is (703) 305-3900, or Customer Service for Technology Center 2100 at (703) 306-5631.

MARC THOMPSON
Marc D. Thompson
Patent Examiner
Art Unit 2142